

IN THE CLAIMS:

Please amend claims 1-2, and add new claims 3-32 as follows:

1. (Currently Amended) A method of communicating using optical pulses comprising:

launching the pulses into an optical~~[-fibre]]~~ fiber communication system including a plurality of sections having dispersion of opposite sign, wherein the pulses are launched at a wavelength at which the system has normal average dispersion.

2. (Currently Amended) A method of communicating using optical pulses comprising:

transmitting the pulses ~~[[into]]~~ over an optical~~[-fibre]]~~ fiber communication system including a plurality of sections having dispersion of opposite sign, wherein the pulses ~~[[hav e]]~~have a wavelength and magnitude that allow the pulses to propagate in the system under normal average dispersion.

3. (New) A method of communicating using optical pulses, the method comprising:

transmitting the pulses over a dispersion-managed optical-fiber communication system, wherein at least some pulses are transmitted at a wavelength at which the system exhibits normal average dispersion.

4. (New) The method of claim 3, wherein the pulses are solitons or soliton-like.

5. (New) The method of claim 3, wherein the pulses are phase modulated return-to-zero when launched.
6. (New) The method of claim 3, wherein the communication system is dispersion managed using sections of fiber having anomalous dispersion.
7. (New) The method of claim 3, wherein the communication system is dispersion managed using sections of SSMF fiber and sections of DCF fiber.
8. (New) The method of claim 3, wherein the communication system is dispersion managed using alternative sections of fiber having opposite signs of dispersion.
9. (New) The method of claim 3, wherein the communication system is dispersion managed using dispersion compensating elements.
10. (New) The method of claim 3, wherein the communication system is dispersion managed using optical gratings.
11. (New) The method of claim 10, wherein the communication system uses optical circulators.

12. (New) The method of claim 3, wherein the communication system is dispersion managed using linear elements.

13. (New) The method of claim 3, wherein the communication system is a WDM system.

14. (New) The method of claim 3, wherein the communication system is a soliton-based communications system.

15. (New) The method of claim 3, wherein the communication system has an asymmetric dispersion map.

16. (New) The method of claim 3, further including pre-chirping the pulses.

17. (New) The method of claim 3, further including launching the pulses with a pulse shape determined according to a dispersion map of the communications system.

18. (New) A method of communicating using optical pulses, the method comprising:

launching the pulses into a dispersion-managed optical-fiber communication system, wherein at least some pulses are transmitted at a wavelength at which the system exhibits normal average dispersion.

19. (New) The method of claim 18, wherein the pulses are solitons or soliton-like.

20. (New) The method of claim 18, wherein the pulses are phase modulated return-to-zero when launched.

21. (New) The method of claim 18, wherein the communication system is dispersion managed using sections of fiber having anomalous dispersion.

22. (New) The method of claim 18, wherein the communication system is dispersion managed using sections of SSMF fiber and sections of DCF fiber.

23. (New) The method of claim 18, wherein the communication system is dispersion managed using alternative sections of fiber having opposite signs of dispersion.

24. (New) The method of claim 18, wherein the communication system is dispersion managed using dispersion compensating elements.

25. (New) The method of claim 18, wherein the communication system is dispersion managed using optical gratings.

26. (New) The method of claim 25, wherein the communication system uses optical circulators.

27. (New) The method of claim 18, wherein the communication system is dispersion managed using linear elements.

28. (New) The method of claim 18, wherein the communication system is a WDM system.

29. (New) The method of claim 18, wherein the communication system is a soliton-based communications system.

30. (New) The method of claim 18, wherein the communication system has an asymmetric dispersion map.

31. (New) The method of claim 18, further including pre-chirping the pulses.

32. (New) The method of claim 18, further including launching the pulses with a pulse shape determined according to a dispersion map of the communications system.